

L Number	Hits	Search Text	DB	Time stamp
1	113	(spermidine) near9 (lys\$5)	USPAT; US-PPGPUB	2002/08/01 08:59
2	2	((spermidine) near9 (lys\$5)) SAME filter	USPAT; US-PPGPUB	2002/08/01 08:59
3	2	((spermidine) near9 (lys\$5)) SAME filter\$3	USPAT; US-PPGPUB	2002/08/01 08:59
4	14	(spermidine) near9 (lysis or lysing or lysed)	USPAT; US-PPGPUB	2002/08/01 09:05
5	1	((spermidine) near9 (lysis or lysing or lysed)) and stripping	USPAT; US-PPGPUB	2002/08/01 09:05

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=> s (spermine or spermidine) and (lysis or lysed or lysing)
L1 255 (SPERMINE OR SPERMIDINE) AND (LYSIS OR LYSED OR LYSING)

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2 141 DUP REM L1 (114 DUPLICATES REMOVED)

=> d 1-141 ti

L2 ANSWER 1 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Interaction of natural polyamines and dimethylsilane analogues with membrane components

L2 ANSWER 2 OF 141 MEDLINE DUPLICATE 1
TI Release of compact nucleoids with characteristic shapes from Escherichia coli.

L2 ANSWER 3 OF 141 MEDLINE DUPLICATE 2
TI Isolation of the Escherichia coli nucleoid.

L2 ANSWER 4 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Nucleic acid transporter systems and their use in cell transformation

L2 ANSWER 5 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI A kit for recovering RNA using adsorption of carbohydrate contaminants onto a polymer

L2 ANSWER 6 OF 141 MEDLINE DUPLICATE 3
TI **Spermidine** acetyltransferase is required to prevent **spermidine** toxicity at low temperatures in Escherichia coli.

L2 ANSWER 7 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Water-based microsphere delivery system for proteins

L2 ANSWER 8 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Rapid and efficient method for isolating plant high molecular weight (HMW) DNA with high purity

L2 ANSWER 9 OF 141 MEDLINE
TI Enhanced uptake of [3H] **spermidine** by 9L rat brain tumors after direct intratumoral infusion of inhibitors of enzymes of the polyamine biosynthetic pathway.

L2 ANSWER 10 OF 141 MEDLINE DUPLICATE 4
TI Comparison of different methods for the isolation and purification of total community DNA from soil.

L2 ANSWER 11 OF 141 MEDLINE DUPLICATE 5
TI Amine composition influences apparent activity of enzyme in charged film microcapsules.

L2 ANSWER 12 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 6
TI The cytoplasmic membrane as the site of the antimicrobial action of N-octylethanolamine.

L2 ANSWER 13 OF 141 MEDLINE DUPLICATE 7
TI Selective labelling of cell-surface polyamine-binding proteins on leukaemic and solid-tumour cell types using a new polyamine photoprobe.

L2 ANSWER 14 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 8
TI The plant cell wall is altered by inhibition of polyamine biosynthesis.

L2 ANSWER 15 OF 141 MEDLINE DUPLICATE 9
TI Retention of trypsin activity in **spermine** alginate microcapsules.

L2 ANSWER 16 OF 141 MEDLINE DUPLICATE 10
TI Stabilization of compact **spermidine** nucleoids from *Escherichia coli* under crowded conditions: implications for *in vivo* nucleoid structure.

L2 ANSWER 17 OF 141 MEDLINE DUPLICATE 11
TI A method to attach lectins to the surface of **spermine** alginate microcapsules based on the avidin biotin interaction.

L2 ANSWER 18 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Apparent inhibition of apoptosis by polyamines and aminothiols in DNA fragmentation assays is artifactual

L2 ANSWER 19 OF 141 MEDLINE DUPLICATE 12
TI Red blood cell polyamines, anaemia and tumour growth in the rat.

L2 ANSWER 20 OF 141 MEDLINE DUPLICATE 13
TI Large complexes of beta-poly(L-malate) with DNA polymerase alpha, histones, and other proteins in nuclei of growing plasmodia of *Physarum polycephalum*.

L2 ANSWER 21 OF 141 MEDLINE DUPLICATE 14
TI Transcription *in vitro* of *Tetrahymena* class II and class III genes.

L2 ANSWER 22 OF 141 MEDLINE DUPLICATE 15
TI B lymphocytes with latent EBV infection appearing in long-term bone marrow cultures (HTLBMCs) from haematological patients induce **lysis** of stromal microenvironment.

L2 ANSWER 23 OF 141 MEDLINE DUPLICATE 16
TI Dexamethasone inhibits nitric oxide-mediated cytotoxicity via effects on both macrophages and target cells.

L2 ANSWER 24 OF 141 MEDLINE DUPLICATE 17
TI Polyamines found in gingival fluid enhance the secretory and oxidative function of human polymorphonuclear leukocytes *in vitro*.

L2 ANSWER 25 OF 141 MEDLINE DUPLICATE 18
TI The effect of OA on proliferation and polyamine metabolism of K 562 leukemic cells and their responsiveness to natural killer cell activity.

L2 ANSWER 26 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 19

TI Comparative effects of fusion facilitators on electrofusion attributes of *N. tabacum* mesophyll protoplasts.

L2 ANSWER 27 OF 141 MEDLINE DUPLICATE 20
TI Polyamine inhibition of transbilayer movement of plasma membrane phospholipids in the erythrocyte ghost.

L2 ANSWER 28 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Effects of polyamines on senescence in *Lactuca sativa* L.: II Stabilization of leaf protoplasts.

L2 ANSWER 29 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Effects of polyamines on senescence in *Lactuca sativa* L. II. Stabilization of leaf protoplasts

L2 ANSWER 30 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 21

TI ¹⁴C-labelling of cell wall of group B streptococci and optimization of protoplast formation by mutanolysin.

L2 ANSWER 31 OF 141 MEDLINE
TI Treatment with a polyamine analog alters DNA-matrix association in HeLa cell nuclei: a nucleoid halo assay.

L2 ANSWER 32 OF 141 MEDLINE DUPLICATE 22
TI In vitro activation of ammonia monooxygenase from *Nitrosomonas europaea* by copper.

L2 ANSWER 33 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Modelling the growth kinetics of *Phanerochaete chrysosporium* in submerged static culture.

L2 ANSWER 34 OF 141 MEDLINE DUPLICATE 23
TI Squalamine: an aminosterol antibiotic from the shark.

L2 ANSWER 35 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Effects of valinomycin on osmotic **lysis** of zymogen granules and amylase exocytosis from parotid acini.

L2 ANSWER 36 OF 141 MEDLINE DUPLICATE 24
TI Structure of the novel steroidal antibiotic squalamine determined by two-dimensional NMR spectroscopy.

L2 ANSWER 37 OF 141 MEDLINE DUPLICATE 25
TI N,N'-thiophene-substituted polyamine analogs inhibit mammalian host cell invasion and intracellular multiplication of *Trypanosoma cruzi*.

L2 ANSWER 38 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 26

TI Rapid DNA extraction protocol form soil for polymerase chain reaction-mediated amplification.

L2 ANSWER 39 OF 141 MEDLINE DUPLICATE 27
TI Ca(2+)-sensitive reduction of 5,5'-dithiobis-(2-nitrobenzoic acid) by rat liver mitochondria.

L2 ANSWER 40 OF 141 MEDLINE DUPLICATE 28
TI Effects of cyclosporin A and a non-immunosuppressive analogue, O-acetyl cyclosporin A, upon the growth of parent and multidrug resistant human

lung cancer cells in vitro.

L2 ANSWER 41 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Characterization of nuclear corticosteroid receptors in rat adipocytes. Regional variations and modulatory effects of hormones

L2 ANSWER 42 OF 141 MEDLINE
TI Characterisation of melarsen-resistant Trypanosoma brucei brucei with respect to cross-resistance to other drugs and trypanothione metabolism.

L2 ANSWER 43 OF 141 MEDLINE DUPLICATE 29
TI Abnormal accumulation and toxicity of polyamines in a difluoromethylornithine-resistant HTC cell variant.

L2 ANSWER 44 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Preparation and separation of intact chromosomes of vertebrates by one-dimensional pulsed-field gel electrophoresis (ODPFGE)

L2 ANSWER 45 OF 141 MEDLINE DUPLICATE 30
TI Polyamines as constituents of the outer membranes of Escherichia coli and Salmonella typhimurium.

L2 ANSWER 46 OF 141 MEDLINE DUPLICATE 31
TI Condensation of DNA by multivalent cations: considerations on mechanism.

L2 ANSWER 47 OF 141 MEDLINE DUPLICATE 32
TI Nuclear estradiol binding in rat adipocytes. Regional variations and regulatory influences of hormones.

L2 ANSWER 48 OF 141 MEDLINE DUPLICATE 33
TI A bacteriophage lambda DNA purification procedure suitable for the analysis of DNA from either large or multiple small lysates.

L2 ANSWER 49 OF 141 MEDLINE DUPLICATE 34
TI Feedback regulation of ornithine decarboxylase expression. Studies using a polysomal run-off system.

L2 ANSWER 50 OF 141 MEDLINE DUPLICATE 35
TI [Regulation by biogenic amines of energy functions of mitochondrial]. Reguliatsiia biogennymi aminami energeticheskikh funksii mitokhondrii.

L2 ANSWER 51 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Permeability of the mitochondrial outer membrane to organic cations

L2 ANSWER 52 OF 141 MEDLINE DUPLICATE 36
TI Hepatic mitochondrial membranolysis repairing by **spermidine**.

L2 ANSWER 53 OF 141 MEDLINE DUPLICATE 37
TI Enhanced uptake of **spermidine** and methylglyoxal-bis(guanylhydrazone) by rat liver mitochondria following outer membrane lysis.

L2 ANSWER 54 OF 141 MEDLINE DUPLICATE 38
TI [Inter-organ differences of the cytometric DNA content in mice: relation of the staining method]. Differences inter-organes du contenu cytometrique en ADN chez la Souris: relations avec la methode de coloration.

L2 ANSWER 55 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Biological activity of photoproducts of 8-MOP-**spermine**

L2 ANSWER 56 OF 141 CAPLUS COPYRIGHT 2002 ACS

TI Antioxidant effects of exogenous polyamines in damage of lysosomes inflicted by xanthine oxidase or stimulated polymorphonuclear leukocytes

L2 ANSWER 57 OF 141 MEDLINE DUPLICATE 39
TI Effect of **spermine** on membranolytic effect of vitamin A in rats.

L2 ANSWER 58 OF 141 MEDLINE DUPLICATE 40
TI Effect of methylglyoxal bis(guanylhydrazone) on hepatic, heart and skeletal muscle mitochondrial carnitine palmitoyltransferase and beta-oxidation of fatty acids.

L2 ANSWER 59 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Outer membrane **lysis** increases accessibility of cationic drugs to the inner mitochondrial membrane

L2 ANSWER 60 OF 141 MEDLINE DUPLICATE 41
TI Trypanosoma brucei: polyamine oxidase mediated trypanolytic activity in the serum of naturally resistant cattle.

L2 ANSWER 61 OF 141 MEDLINE DUPLICATE 42
TI The plasma membrane of yeast protoplasts exposed to hypotonicity becomes porous but does not disintegrate in the presence of protons or polyvalent cations.

L2 ANSWER 62 OF 141 MEDLINE
TI Correlation between outer-membrane **lysis** and susceptibility of mitochondria to inhibition by adriamycin and polyamines.

L2 ANSWER 63 OF 141 MEDLINE DUPLICATE 43
TI K⁺-stimulated p-nitrophenyl phosphatase is not a partial reaction of the gastric (H⁺ + K⁺)-transporting ATPase. Evidence supporting a new model for the univalent-cation-transporting ATPase systems.

L2 ANSWER 64 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI OUTER MEMBRANE **LYSIS** INCREASES ACCESSIBILITY OF CATIONIC DRUGS TO THE INNER MITOCHONDRIAL MEMBRANE.

L2 ANSWER 65 OF 141 MEDLINE DUPLICATE 44
TI A method for flow cytometric cell cycle analysis of normal and psoriatic human epidermis based on a detergent/citric acid technique for suspension of nuclei.

L2 ANSWER 66 OF 141 MEDLINE DUPLICATE 45
TI Polyamine oxidase-mediated trypanosome killing: the role of hydrogen peroxide and aldehydes.

L2 ANSWER 67 OF 141 MEDLINE DUPLICATE 46
TI Factors affecting the isolation of CCC DNA from *Streptomyces lividans* and *Escherichia coli*.

L2 ANSWER 68 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Polyamines in moderately halophilic bacteria and their physiological role

L2 ANSWER 69 OF 141 MEDLINE
TI Urinary excretion of monoacetyl polyamines in patients with non-Hodgkin's lymphoma.

L2 ANSWER 70 OF 141 MEDLINE DUPLICATE 47
TI Lytic action of cloned phi X174 gene E.

L2 ANSWER 71 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 48

TI ISOLATION AND PURIFICATION OF RAT HEPATOMA NUCLEI ACTIVE IN THE TRANSPORT OF MESSENGER RNA IN-VITRO.

L2 ANSWER 72 OF 141 MEDLINE DUPLICATE 49
TI Effect of leukocyte hydrolases on bacteria XVI. Activation by leukocyte factors and cationic substances of autolytic enzymes in *Staphylococcus aureus*: modulation by anionic polyelectrolytes in relation to survival of bacteria in inflammatory exudates.

L2 ANSWER 73 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI An improved technique for the isolation of higher plant chromosomes

L2 ANSWER 74 OF 141 MEDLINE
TI Effect of polyamines and cations on the in vitro methylation of histones.

L2 ANSWER 75 OF 141 MEDLINE DUPLICATE 50
TI Excretion of polyamines from baby hamster kidney cells (BHK-21/C13: effect of infection with Herpes Simplex Virus Type 1.

L2 ANSWER 76 OF 141 MEDLINE DUPLICATE 51
TI Studies on *Escherichia coli* chromosome proteins. I. Analysis of the proteins by two-dimensional gel electrophoresis.

L2 ANSWER 77 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI STRUCTURE OF THE CHROMATIN OF THE NUCLEI OF RAT THYMUS **LYSED** ON EPIGASTRIUM.

L2 ANSWER 78 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 52
TI EFFECT OF POLY CATIONS ON THERMAL DAMAGE OF CHLAMYDOMONAS-REINHARDII PROTOPLASTS.

L2 ANSWER 79 OF 141 MEDLINE
TI Inability of the C3a anaphylatoxin to promote cellular **lysis**.

L2 ANSWER 80 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Effect of leukocyte hydrolases on bacteria. XIII. Role played by leukocyte extracts, lysolecithin, phospholipase A₂, lysozyme, cationic proteins, and detergents in the solubilization of lipids from *Staphylococcus aureus* and group A streptococci

L2 ANSWER 81 OF 141 MEDLINE DUPLICATE 53
TI RNA synthesis in isolated nuclei of the dinoflagellate *Cryptocodinium cohnii*.

L2 ANSWER 82 OF 141 MEDLINE DUPLICATE 54
TI Excretion of **spermidine** from BHK-21/C13 cells exposed to 6-thioguanosine.

L2 ANSWER 83 OF 141 MEDLINE DUPLICATE 55
TI Folded chromosomes of vegetative *Bacillus subtilis*: composition and properties.

L2 ANSWER 84 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Preparation of large molecular weight DNA from the fungus *Aspergillus nidulans*

L2 ANSWER 85 OF 141 MEDLINE
TI Identification of a biochemically unique DNA-membrane interaction involving the *Escherichia coli* origin of replication.

L2 ANSWER 86 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

DUPLICATE 56
TI POLY AMINES RNASE AND THE IMPROVEMENT OF OAT LEAF PROTOPLASTS.

L2 ANSWER 87 OF 141 MEDLINE DUPLICATE 57
TI **Spermidine**-Deoxyribonucleic acid interaction in vitro and in *Escherichia coli*.

L2 ANSWER 88 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 58
TI STABILIZATION OF OAT LEAF PROTOPLASTS THROUGH POLY AMINE MEDIATED INHIBITION OF SENESCENCE.

L2 ANSWER 89 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI PURIFICATION AND CHARACTERIZATION OF THE LYtic ENZYME N ACETYLMURAMYL-L ALANINE AMIDASE OF BACTERIO PHAGE T-7.

L2 ANSWER 90 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI STABILIZATION OF OAT LEAF PROTOPLASTS BY L ARGinine L LYSINE AND POLY AMINES.

L2 ANSWER 91 OF 141 MEDLINE DUPLICATE 59
TI Autolysis of *Neisseria gonorrhoeae*.

L2 ANSWER 92 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 60
TI PHYSIOLOGICAL STUDIES ON AN ISOLATE OF SAPROLEGNIA-FERAX FROM THE LARVAL GUT ON THE BLACK FLY *SIMULIUM-VITTATUM*.

L2 ANSWER 93 OF 141 MEDLINE
TI 1,4-Diaminobutane (putrescine), **spermidine**, and **spermine**

L2 ANSWER 94 OF 141 MEDLINE DUPLICATE 61
TI Association of the folded chromosome with the cell envelope of *E. coli*: characterization of the proteins at the DNA-membrane attachment site.

L2 ANSWER 95 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
DUPLICATE 62
TI THE EFFECT OF LYSOZYME ON DNA MEMBRANE ASSOCIATION IN *ESCHERICHIA-COLI*.

L2 ANSWER 96 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Cell division, macromolecular synthesis, and morphology dependent on the state of the envelope in a mutant of *Klebsiella pneumoniae*

L2 ANSWER 97 OF 141 MEDLINE DUPLICATE 63
TI Osmotic **lysis** of sphaeroplasts from *Saccharomyces cerevisiae* grown anaerobically in media containing different unsaturated fatty acids.

L2 ANSWER 98 OF 141 MEDLINE DUPLICATE 64
TI Antipolyamine antibodies and cell **lysis**. The inhibitory effect of putrescine.

L2 ANSWER 99 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Effect of ionic strength, pH amines, and divalent cations on the lytic activity of T 4 lysozyme

L2 ANSWER 100 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Electrophoretic mobility of BP8 ascites tumor cells and allergized lymph-node cells after treatment with inflammatory mediators, ptomaines, polyamines, antisera, and neuraminidase or heparin

L2 ANSWER 101 OF 141 MEDLINE DUPLICATE 65

TI Thermal **lysis** of bacterial membranes and its prevention by polyamines.

L2 ANSWER 102 OF 141 MEDLINE DUPLICATE 66
TI Effect of **spermine** on host-cell **lysis** and reproduction by a lactic streptococcal bacteriophage.

L2 ANSWER 103 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Distribution of polysomes, ribosomes, and ribosomal subunits in exponential-phase cells of *Bacillus licheniformis*

L2 ANSWER 104 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Inhibition of cell division in *Micrococcus lysodeikticus* dis-II

L2 ANSWER 105 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Efficiency of tritium counting with seven radioautographic emulsions

L2 ANSWER 106 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI **Lysis** of *Desulfovibrio vulgaris* by ethylenediaminetetraacetic acid and lysozyme

L2 ANSWER 107 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Role of galactose or glucose 1-phosphate in preventing the **lysis** of *Streptococcus diacetilactis*

L2 ANSWER 108 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI RNA polymerase (ribonucleotide triphosphate-ribonucleic acid ribonucleotidyl transferase)

L2 ANSWER 109 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Metabolic **lysis** of yeast protoplasts

L2 ANSWER 110 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI The effects of various anions and cations on the **lysis** of yeast protoplasts by osmotic shock

L2 ANSWER 111 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Replication of T4fII bacteriophage in *Escherichia coli* K-12 (.lambda.)

L2 ANSWER 112 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Responses of a psychrophilic marine bacterium to changes in its ionic environment

L2 ANSWER 113 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Uptake and subcellular localization of tritiated **spermine** in *Escherichia coli*

L2 ANSWER 114 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Studies on the interaction of homologs of **spermine** with deoxyribonucleic acid and with bacterial protoplasts

L2 ANSWER 115 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI RNA synthesis in intact rat liver nuclei

L2 ANSWER 116 OF 141 MEDLINE DUPLICATE 67
TI **Lysis** of *Vibrio succinogenes* by ethylenediamine-tetraacetic acid or lysozyme.

L2 ANSWER 117 OF 141 MEDLINE DUPLICATE 68
TI Effect of **spermine** on **lysis** and reproduction by bacteriophages phi-X174, lambda, and f2.

L2 ANSWER 118 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Simple method for concentrating bacteriophage *phi*X174

L2 ANSWER 119 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Function and location of a "germination enzyme" in spores of *Bacillus cereus*

L2 ANSWER 120 OF 141 MEDLINE DUPLICATE 69
TI Steroid **lysis** of protoplasts and effects of stabilizers and steroid antagonists.

L2 ANSWER 121 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Antiphage action of oxidized polyamines

L2 ANSWER 122 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Lactose utilization in a cryptic strain *Escherichia coli* ML 35

L2 ANSWER 123 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Stabilization of *Streptococcus faecalis* protoplasts by **spermine**

L2 ANSWER 124 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Factors influencing osmotic fragility of *Mycoplasma*

L2 ANSWER 125 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Conditions for inactivation of bacteriophages T1-T7 by a polyanion

L2 ANSWER 126 OF 141 MEDLINE DUPLICATE 70
TI Mechanism of protection of cells by **spermine** against lysozyme-induced **lysis**.

L2 ANSWER 127 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Inhibitory effect of glycine on the production of amylase and proteinase by *Bacillus subtilis*. IV. Comparison in cytological effect of glycine on glycine-sensitive and resistant strains

L2 ANSWER 128 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI **Lysis** of *Mycoplasma*, bacterial protoplasts, spheroplasts, and L-forms by various agents

L2 ANSWER 129 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Stabilization of protoplasts and spheroplasts by **spermine** and other polyamines

L2 ANSWER 130 OF 141 MEDLINE DUPLICATE 71
TI Inhibition of reticulocyte **lysis** by alkyl polyamines.

L2 ANSWER 131 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Streptomycin-triggered depolymerization of ribonucleic acid in *Escherichia coli*

L2 ANSWER 132 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI The interaction of **spermine** and native deoxyribonucleic acid (DNA)

L2 ANSWER 133 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Glycine-induced cell **lysis** and inhibition of enzyme production

L2 ANSWER 134 OF 141 MEDLINE
TI **Spermine** as a protective agent against osmotic **lysis**.

L2 ANSWER 135 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI **Spermine** as a protective agent against osmotic **lysis**

L2 ANSWER 136 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Bacterial agglutination induced by basic polypeptides originating from organ tissues

L2 ANSWER 137 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Stabilizing effect of **spermine** and related polyamines and bacterial chloroplasts

L2 ANSWER 138 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Presence of polyamines in certain bacterial viruses

L2 ANSWER 139 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI **Lysis** of *Bacillus subtilis* by amines, acridines, and phenothiazines

L2 ANSWER 140 OF 141 CAPLUS COPYRIGHT 2002 ACS
TI Scientific and practical value of some tests of neoplasm malignancy with particular reference to larynx cancer. (The Tokuoka reaction and the test of Bolen.)

L2 ANSWER 141 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI PROTECTIVE ACTION OF POLY AMINES ON THERMAL **LYSIS** OF PROTOPLASTS OF *MICROCOCCUS-LYSODEIKTICUS* AND *BACILLUS-SUBTILIS*.

=> d 110 bib ab

L2 ANSWER 110 OF 141 CAPLUS COPYRIGHT 2002 ACS
AN 1968:400938 CAPLUS
DN 69:938
TI The effects of various anions and cations on the **lysis** of yeast protoplasts by osmotic shock
AU Indge, K. J.
CS Univ. Manchester, Manchester, Engl.
SO J. Gen. Microbiol. (1968), 51(3), 425-32
CODEN: JGMIAN
DT Journal
LA English
AB The resistance of *Saccharomyces carlsbergensis* protoplasts to **lysis** by osmotic shock was lowered by such chelating agents as citrate, EDTA, and ATP at concns. of 0.01 M and also by decreases in pH values from 7.4-5.3. The effects of the chelating agents on protoplast **lysis** were inhibited by K+, Na+, and Mg2+ and **spermidine**. Chelating agents increased **lysis** only during osmotic stress, and the cations did not influence **lysis** unless chelators were also present. This suggested a cation-binding site in the protoplast membrane which is involved in maintaining membrane structure. 19 references.

=> d 67 84 bib ab

L2 ANSWER 67 OF 141 MEDLINE DUPLICATE 46
AN 85038968 MEDLINE
DN 85038968 PubMed ID: 6387733
TI Factors affecting the isolation of CCC DNA from *Streptomyces lividans* and *Escherichia coli*.
AU Kieser T
SO PLASMID, (1984 Jul) 12 (1) 19-36.
Journal code: 7802221. ISSN: 0147-619X.
CY United States

DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198411
 ED Entered STN: 19900320
 Last Updated on STN: 19900320
 Entered Medline: 19841128
 AB Based on the results of a systematic study of factors affecting plasmid yield and purity, a procedure suitable for the rapid screening for and isolation of covalently closed circular DNA from *Streptomyces lividans* and *Escherichia coli* was developed. The method consists of **lysis** of lysozyme-treated bacteria combined with alkaline denaturation of DNA at high temperature. Renaturation of CCC DNA and precipitation of single-stranded DNA together with protein is achieved by the addition of a minimal amount of phenol/chloroform. The screening procedure uses only a single tube and the samples can be analyzed by agarose gel electrophoresis about 30 min after **lysis**. Removal of phenol and further purification of the plasmid preparation is achieved by consecutive precipitations with isopropanol and **spermine**, followed by extraction with ethanol, producing samples suitable for restriction endonuclease digestion, ligation, and transformation of *S. lividans* protoplasts or competent *E. coli* cells in about 2 h. All steps of the procedure are explained in detail with information about the effects of changing parameters. This should help the experimenter to obtain reproducible results and may be useful if the method has to be adapted to new strains or plasmids.
 L2 ANSWER 84 OF 141 CAPLUS COPYRIGHT 2002 ACS
 AN 1978:593454 CAPLUS
 DN 89:193454
 TI Preparation of large molecular weight DNA from the fungus *Aspergillus nidulans*
 AU Morris, N. Ronald
 CS Dep. Pharmacol., Coll. Med. Dent. New Jersey, Piscataway, N. J., USA
 SO J. Gen. Microbiol. (1978), 106(2), 387-9
 CODEN: JGMIAN; ISSN: 0022-1287
 DT Journal
 LA English
 AB Large-mol.-wt. DNA was prep'd. from the spores of *A. nidulans* by vortexing the spores with glass beads in a **spermidine** buffer to minimize DNA shearing during vortexing. Intracellular DNase mols. were inhibited by EDTA. Recovery was .apprx.250 .mu.g DNA/g spores. Large-mol.-wt. DNA was also prep'd. by detergent **lysis** of protoplasts prep'd. from *A. nidulans* mycelia by modification of the method of O. M. H. de Vries (1974); recovery was .apprx.450 .mu.g DNA/g protoplasts. The DNA from both sources had a mol. wt. of .apprx.3 .times. 107.

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=> d 48 73 bib ab
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L2 ANSWER 48 OF 141 MEDLINE DUPLICATE 33
AN 90252973 MEDLINE
DN 90252973 PubMed ID: 2160201
TI A bacteriophage lambda DNA purification procedure suitable for the analysis of DNA from either large or multiple small lysates.
AU Lockett T J
CS CSIRO Division of Biotechnology, Laboratory for Molecular Biology, North Ryde, New South Wales, Australia.
SO ANALYTICAL BIOCHEMISTRY, (1990 Mar) 185 (2) 230-4.
Journal code: 0370535. ISSN: 0003-2697.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199006
ED Entered STN: 19900720
Last Updated on STN: 19970203
Entered Medline: 19900621
AB A method for the efficient preparation of high quality bacteriophage lambda DNA from cleared lysates is described. Advantages of the method include high DNA yields (typically around 0.8 micrograms of DNA/1 ml of cleared lysate), speed of processing (approximately 2 h from lysate to DNA), economy, and the absence of any requirement for phenol or chloroform extractions. The technique involves the concentration of phage particles by standard polyethylene glycol precipitation followed by enzymatic treatment to remove contaminating RNA and DNA. Phage particles are then lysed with sodium dodecyl sulfate (SDS) at elevated pH and temperature. Contaminating protein/SDS complexes are rendered insoluble by the addition of potassium acetate and removed by centrifugation. The quality of the resultant DNA is comparable to that prepared by cesium chloride banding for all standard molecular biological purposes providing that spermidine is included in all restriction endonucleases digestions.

L2 ANSWER 73 OF 141 CAPLUS COPYRIGHT 2002 ACS
AN 1982:118447 CAPLUS
DN 96:118447
TI An improved technique for the isolation of higher plant chromosomes
AU Griesbach, R. J.; Malmberg, R. L.; Carlson, P. S.
CS Dep. Hortic., Michigan State Univ., East Lansing, MI, 48824, USA
SO Plant Sci. Lett. (1982), 24(1), 55-60
CODEN: PTSLAF; ISSN: 0304-4211
DT Journal
LA English
AB An improved cell lysis buffer is described for the isolation of physiol. active mitotic and meiotic chromosomes from a large no. of plant species (corn, lily, tomato, pea, onion, day lily, tobacco, and broad bean) and from a wide variety of tissues (root tips, microsporocytes, and cells from tissue cultures). The method involved digestion with a soln. contg. colchicine, cellulysin, macerase, pectinase, rhozyme, and mannitol at pH 5.7, passage through a pasteur pipet, collection of the protoplasts by centrifugation, treatment with the lysis buffer, and passage through a 27-gauge hypodermic needle. Of the various lysis buffers examd., optimum results were obtained with a buffer contg. 15 mM

HEPES, 1 mM EDTA, 15 mM dithiothreitol, 0.5 mM **spermine**, 80 mM KCl, 20 mM NaCl, 300 mM sucrose, and 500 mM hexylene glycol at pH 7.0. The isolated structures morphol. resembled chromosomes with primary and secondary constrictions and contained DNA that was stained by DNA-specific dyes. The recovery of chromosomes ranged 24-71% and varied with the species and the tissue.

=> d 3, 5, 38 bib ab

YOU HAVE REQUESTED DATA FROM FILE 'MEDLINE, BIOSIS, CAPLUS' - CONTINUE? (Y)/N:y

L2 ANSWER 3 OF 141 MEDLINE DUPLICATE 2
AN 2001189905 MEDLINE
DN 21175596 PubMed ID: 11278063
TI Isolation of the *Escherichia coli* nucleoid.
AU Cunha S; Odijk T; Suleymanoglu E; Woldringh C L
CS Swammerdam Institute for Life Sciences, BioCentrum Amsterdam, University of Amsterdam, Kruislaan 316, 1098 SM Amsterdam, The Netherlands.
SO BIOCHIMIE, (2001 Feb) 83 (2) 149-54. Ref: 33
Journal code: 1264604. ISSN: 0300-9084.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200106
ED Entered STN: 20010611
Last Updated on STN: 20010611
Entered Medline: 20010607
AB Numerous protocols for the isolation of bacterial nucleoids have been described based on treatment of cells with sucrose-lysozyme-EDTA and subsequent **lysis** with detergents in the presence of counterions (e.g., NaCl, **spermidine**). Depending on the **lysis** conditions both envelope-free and envelope-bound nucleoids could be obtained, often in the same lysate. To investigate the mechanism(s) involved in compacting bacterial DNA in the living cell, we wished to isolate intact nucleoids in the absence of detergents and high concentrations of counterions. Here, we compare the general **lysis** method using detergents with a procedure involving osmotic shock of *Escherichia coli* spheroplasts that resulted in nucleoids free of envelope fragments. After staining the DNA with DAPI (4',6-diamidino-2-phenylindole) and cell **lysis** by either isolation procedure, free-floating nucleoids could be readily visualized in fluorescence microscope preparations. The detergent-salt and the osmotic-shock nucleoids appeared as relatively compact structures under the applied ionic conditions of 1 M and 10 mM, respectively. RNase treatment caused no dramatic changes in the size of either nucleoid.

L2 ANSWER 5 OF 141 CAPLUS COPYRIGHT 2002 ACS
AN 2000:741033 CAPLUS
DN 133:278360
TI A kit for recovering RNA using adsorption of carbohydrate contaminants onto a polymer
IN Kiefer, Evelyn; Heller, Werner; Ernst, Dietrich; Sandermann, Heinrich
PA Gsf-Forschungszentrum fur Umwelt und Gesundheit, G.m.b.H., Germany
SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1044984	A2	20001018	EP 2000-108179	20000413
	EP 1044984	A3	20010613		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19916534	A1	20001019	DE 1999-19916534	19990413
PRAI	DE 1999-19916534	A	19990413		
AB	A kit for the purifn. of RNA from a wide array of biol. samples is described. The kit uses a lysis buffer contg. a polymer that can be used to capture carbohydrates that copurify with the RNA immediately upon liberation and simplify the procedure. The preferred polymer is polyvinylpyrrolidone. Use of the method to isolate RNA from of no. of green and woody plants is demonstrated. The material was heated in the lysis buffer (Tris Hcl pH 8.0 40mM, CTAB 3%, PVP 2%, EDTA 50mM, NaCl 2M, Spermidine , 0.5 g/L, .beta.-mercaptoethanol 2%) at 65.degree. for 5 min. This was cooled, mixed with chloroform/isoamyl alc. and a sorbent (Nucleon PhytoPure Resin) to capture the RNA. The RNA can then be collected by solvent extn. and pptn. with DNA removed with DNase.				
L2	ANSWER 38 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.				
	DUPLICATE 26				
AN	1993:124223 BIOSIS				
DN	PREV199395068323				
TI	Rapid DNA extraction protocol form soil for polymerase chain reaction-mediated amplification.				
AU	Smalia, K. (1); Cresswell, N.; Mendonca-Hagler, L. C.; Wolters, A.; Van Elsas, J. D.				
CS	(1) Institute Biochemistry and Plant Virol., Biologische Bundesanstalt, Messeweg 11/12, Braunschweig Germany				
SO	Journal of Applied Bacteriology, (1993) Vol. 74, No. 1, pp. 78-85. ISSN: 0021-8847.				
DT	Article				
LA	English				
AB	A simple and rapid method of DNA extraction from soil was developed and DNA was made suitable for subsequent efficient amplification by the polymerase chain reaction (PCR). Key features of the extraction and purification were cold lysozyme- and SDS-assisted lysis with either freezing-thawing or bead beating, cold phenol extraction of the resulting soil suspension, CsCl and KAc precipitation and, finally, spermine -HCl or glass milk purification of DNA. Crude DNA preparations contained 4-20 mu-g DNA per g of soil extracted, and at least 50% of this was recovered in the final purified DNA preparations. The resulting DNA was pure enough to be restricted by various enzymes, and was amplifiable at concentrations of up to 20 ng of soil-derived DNA per 50 mu-l reaction mix. Amplification of a 683 bp target sequence, pat, was performed with different Taq DNA polymerases. Application of the protocol enabled us to detect target DNA derived from roughly 10 ⁻³ introduced <i>Pseudomonas fluorescens</i> (RP4::pat) cfu per g of soil. The fate of an introduced population in the soil could be followed to this limit with PCR-assisted detection of target DNA. In addition, target DNA was detected in soil 5 months after release, when the introduced organism was no longer detectable on selective agar plates. The extraction and purification protocol applied to various different soil types resulted in DNA of sufficient purity to permit amplification by PCR.				

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